

*Discussion:* This is the second known species in the genus *Volsellacarus*. It changes the original conception of the genus only in that the first coxae of the male may be pointed (fig. 15) rather than rounded as in *V. ovalis*. III-Leg-5 of the male, while without pronounced sexual dimorphism as in *Neoacarus*, does exhibit valuable specific characters. Figs. 13 and 16 illustrate III-Leg-5 and 6 of *sabulonius* and *ovalis* respectively. The new species is proportionally much narrower than *V. ovalis*.

Two species of *Neoacarus*, originally described from the Ozark and Rocky Mountain area, are now known to occur in eastern North America.

*Neoacarus similis* Cook: One male, from gravel deposits in a stream near Griffen (on Route #8, three miles from Warren Co. line), Hamilton Co., New York, August 19, 1964; one female, taken in a gravel bar in a small stream near Limestone, Victoria Co., New Brunswick, August 26, 1964; three males, one female, found in a gravel bar in the North Branch of the Meduxnekeag River at Monticello, Aroostook Co., Maine, August 28, 1964.

*Neoacarus ozarkensis* Cook: One male, taken in a gravel deposit in Knapp's Creek near Minnehaha Springs, Pocahontas Co., West Virginia, July 22, 1964; one male, two females, from gravel deposits in a stream near Griffen (on Route #8, three miles from Warren Co. line), Hamilton Co., New York, August 19, 1964.

#### REFERENCES

- Cook, David R. 1963. Studies on the phreaticolous water mites of North America: the family Neoacaridae. *Ann. Ent. Soc. Amer.* 56:481-487.

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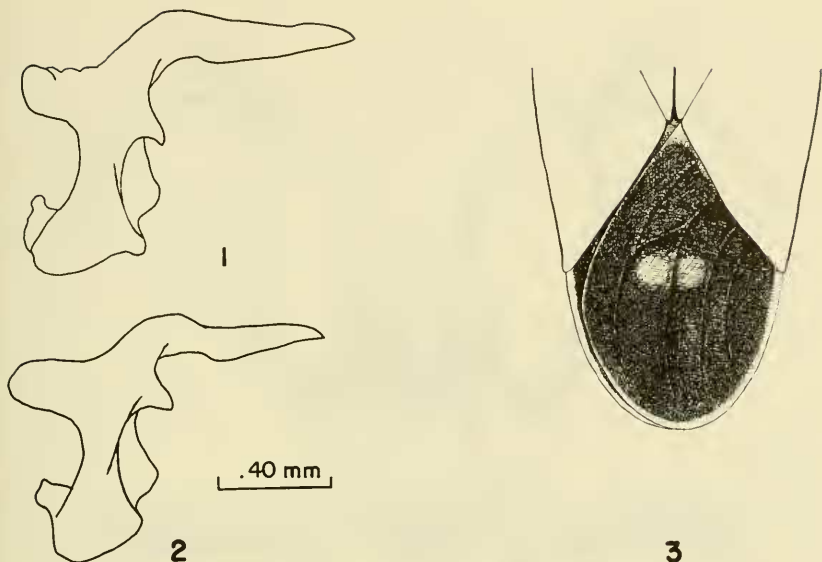
### A NEW SPECIES OF LYGAEUS FROM PERU (HEMIPTERA: LYGAEIDAE)

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The genus *Lygaeus* Fabricius is the type genus of the family Lygaeidae and was originally used to include many species now in other heteropterous families as well as throughout the Lygaeidae. Attempts to better define the various genera of the Lygaeidae have resulted in the use of the phallus as a taxonomic character. Ashlock

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Figs. 1 and 3, *Lygaeus slateri*, n. sp.: 1, ♂ paramere; 3, membrane, dorsal view. Fig. 2, *L. inaequalis* Walker, ♂ paramere.

(1957) points out the value of the phallus for discrimination of the higher taxa in the Lygaeidae and as a secondary consideration the use of the sclerotized portions (parameres) for possible specific discriminations. It is the paramere or clasper characteristic which has been used primarily to define *Lygaeus slateri* n. sp. as a part of the revision of the entire genus.

The parameres are bilaterally symmetrical and relatively simple in *Lygaeus*. Three regions are definable on each paramere: the basal shank, the proximal hook, and the apical hook. The apical hook is arm-like with a curvature of varying intensity. This portion is always hollowed out along its inner surface. The basal shank also shows a varying type of concavity. The inner margin of the shank portion of the paramere exhibits many of the specific modifications. Specific differences can most readily be seen when the left paramere is oriented with the inner concave side dorsal. In this position one can see the concavity of the arm and shank as well as the outline provided by the presence or absence of processes, figs. 1 and 2.

***Lygaeus slateri*, n. sp.**  
(Figs. 1 and 3)

Head, anterior portion of pronotum, scutellum and distal abdominal segments grey-black; anterior half of clavus and posterior half of pronotum yellow-orange;

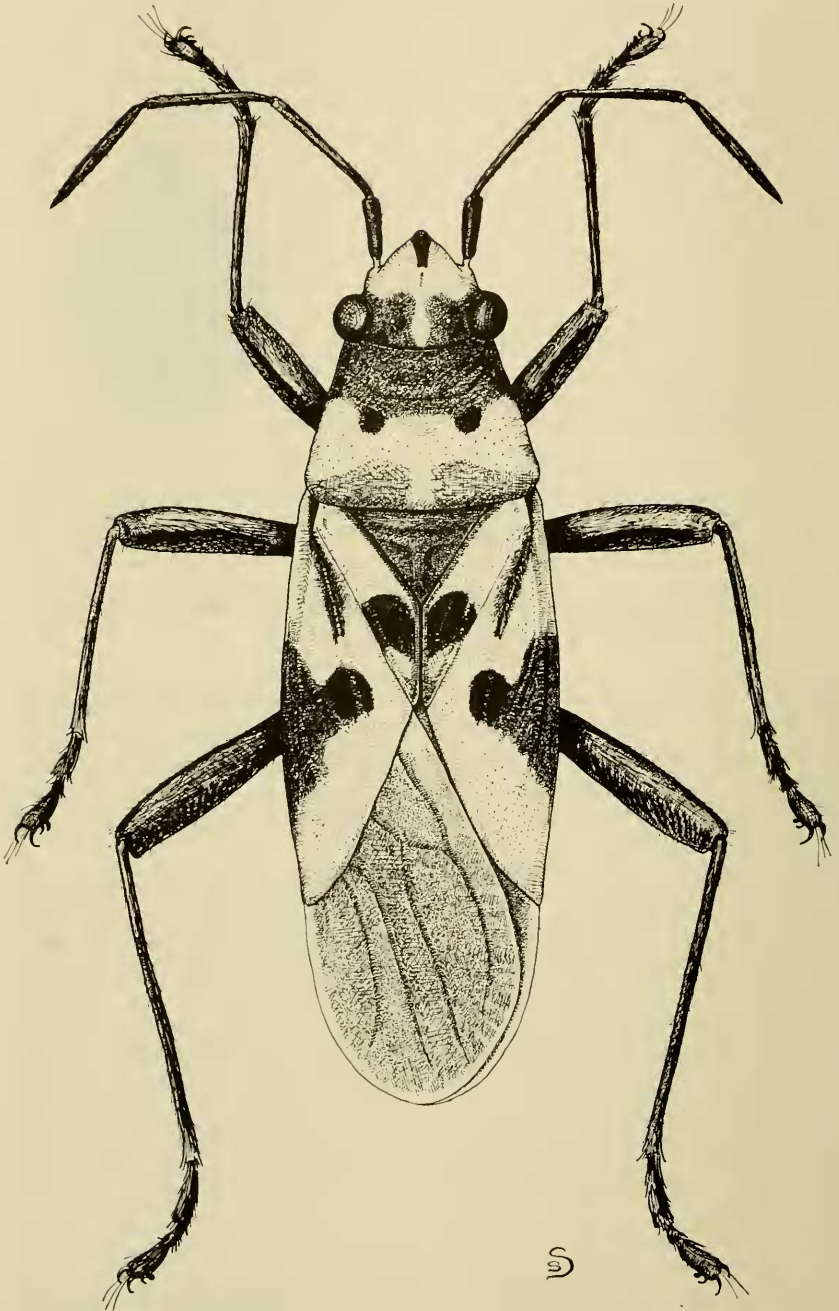


Fig. 4, *Lygaeus inaequalis* Walker, dorsum, ♂.

pro, meso and metapleura grey with exception of slight overlapping of yellow-orange from pronotum on upper margin of propleuron and with slight darkening along entire ventral midline; abdomen bright orange with yellow border along narrow edge of connexivum, also with 2 black spots on each segment of abdomen, 1 on the connexival border and 1 extending dorsally from the ventral midline. Ostiolar peritreme, antennae, legs, genital area and labium black.

Eyes large, occupying most of lateral surface of head, a prominent orange fascia extending from base of vertex as a narrow parallel sided band, branching anterior to eyes and extending laterally to include antenniferous tubercles; tylus with short white pilosity; ocelli located in area between eye and narrow median orange band. Head length 2.32 mm; width across eyes, 3.04 mm; interocular space, 2.40 mm.

Clavus with median black spot not attaining outer margin but merging with inner margin of clavus and extending to apex along inner margin, spot then meets outer margin of corium at the level of the claval apex. Scutellum with T-shaped carinae; length, 1.40 mm; width, 2.14 mm.

Membrane dark brown suffusing to black, veins concolorous with background of membrane. In addition, the membrane has 2 discal white spots in the center at the level of the apices of the corium; membranal margin white. Antennae relatively large and moderately thick, segments III and IV fusiform, labium elongate attaining metacoxae; length of antennal segments: I, .92 mm; II, 2.08 mm; III, 1.72 mm; IV, 2.24 mm.

Holotype: male; Contumefa, Peru-2700 M II-1950 (Weyrauch): USNM 69066.

Paratypes, same data as holotype: 1 male, J. A. Slater Collection, University of Connecticut; 1 female, USNM.

Close geographical and morphological relationship exists between *Lygaeus slateri* and *Lygaeus inaequalis* Walker 1872, (fig. 4). Externally the latter species lacks a pair of white discal spots which are quite conspicuous on the membrane of *slateri* (fig. 3). However, the paramere structure of these two species presents the most reliable diagnostic characteristic for identification. The major difference is in the angle of the dorsal projection from the shank which in *slateri* is more acute (fig. 1). In the arm of the paramere in *inaequalis* there is also a notch on the dorsal surface which is absent in *slateri* (fig. 2).

I have named this species for Dr. James A. Slater for sharing his knowledge of the Lygaeidae with me and also for extending both encouragement and criticism during this research.

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Walker, F. 1872. Catalogue of the specimens of Hemiptera-Heteroptera in the collection of the British Museum. London, Pt. 5: p. 49.